

Serial No. 10/055,085



Docket No. XEEE 2 13215

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : West
For : Apparatus for Applying
Foam Material to a Substrate
Serial No. : 10/055,085
Filing Date : January 25, 2002
Gr. Art Unit : 3752
Examiner : Robin Octavia Evans
Our Docket : XEEE 2 13215

DECLARATION PURSUANT TO 37 C.F.R. § 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

I, Richard A. West, declare as follows:

1. I am the inventor of the subject matter of the above-identified patent application.
2. I am familiar with the structure and operation of the apparatus disclosed in U.S.

Patent 6,126,766 to Hunter, Jr. for depositing layers of foamed plastic material on an underlying roof surface.

3. I was aware of the structure and operation of the apparatus disclosed in the foregoing patent to Hunter, Jr. prior to the filing of my patent application, as is evidenced by the disclosure and

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Nancy M. Grams
(TYPED OR PRINTED NAME OF SENDER)
Nancy M. Grams
(SIGNATURE)

description of U.S. Patent No. 6,024,147 to Hunter, Jr. in the specification of my patent application, the cited Hunter, Jr. patent having issued from a divisional application of the '147 patent.

4. I have personally observed the operation of the Hunter, Jr. apparatus in depositing layers of foam plastic material on a roof surface.

5. In the operation of the Hunter, Jr. apparatus, and with reference to Figure 6 of the cited '766 patent, the apparatus does not travel along the roof surface 61 in the direction from point A to point E. Rather, the apparatus travels along paths A-E, each of which is perpendicular to the plane of the sheet on which Figure 6 appears and each of which paths has a beginning end and an ending end. The Hunter, Jr. apparatus is moved along path A from the beginning end to the ending end at a first constant speed to deposit a first strip of foam which is of the same first thickness from beginning to end. The apparatus is then shifted laterally to the position of path B and is moved along path B from the beginning end to the ending end at a second constant speed, which is less than the first speed, to deposit a second strip of foam which is thicker than the first strip and which is of the same second thickness from beginning to end. The apparatus is then shifted laterally and sequentially to the positions of paths C, D and E, and is operated along each path as described above and at a constant speed along each path which is less than the constant speed for the preceding path. When completed, the deposited foam surface is stepped, or terraced, as shown in Figure 6 of Hunter, Jr.

6. The speed of the Hunter, Jr. apparatus does not change during movement of the apparatus from the beginning to the ending end of the paths A-E.

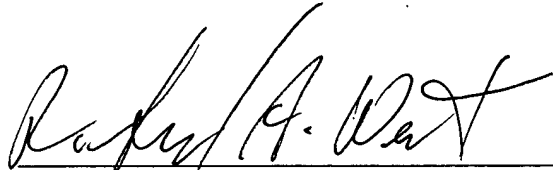
7. The Hunter, Jr. apparatus cannot be operated to deposit a layer of foamed plastic material along a path on an underlying surface for the layer of material to slope uniformly in the direction between the beginning and ending ends of the path.

8. In contrast to the operation of the Hunter, Jr. apparatus, the apparatus of my invention includes a programmable controller by which the motor that moves the apparatus can be controlled to enable depositing a layer of foamed plastic material along a path having beginning and ending ends for the layer of material to slope upwardly or downwardly along the path in the direction between the beginning and ending ends, depending on the initial speed of the apparatus. The speed of movement of the apparatus progressively increases as the apparatus moves toward the ending end of the path for the layer of material to slope downwardly along the path, or the speed progressively decreases for the layer of material to slope upwardly along the path.

9. Prior to my invention, and as is set forth in the specification of my application, the only way to provide a flat roof surface with a sloping contour was to attach manufactured tapered insulation boards to the roof surface and then cover the boards with a waterproofing membrane. This is a labor intensive and expensive procedure. The alternative provided in accordance with the cited Hunter, Jr. patent is a terraced contour of adjacent flat surfaces of different thicknesses which create the potential for the undesired standing or ponding of water on the flat surfaces.

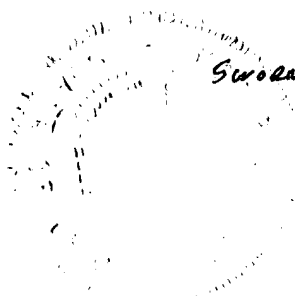
10. My invention advantageously enables providing a flat roof surface with a sloping profile more efficiently and less expensively than heretofore possible, while providing the advantages of a sloping surface including constant runoff of water and elimination or reducing of ponding.

11. I further declare that all statement made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issuing thereon.



Richard A. West

Date: Oct. 28, 2004



Sworn & Signed before me this 28th day Oct October 2004.

Willard J. Harrison

WILLARD J. HARRISON
NOTARY PUBLIC, STATE OF OHIO
MY COMMISSION EXPIRES MAY 4, 2005